Patent Claim	Disclosure in Specification
1. A portable oxygen delivery control apparatus for controlling a flow of oxygen to a user in an open-loop breathing system including an oxygen supply and a delivery apparatus for delivering supplemental oxygen to a user comprising:	p. 9, lines 9-18; p. 10, lines 16-25; and Figures 1 and 2.
an oximeter arranged to measure a blood- oxygen saturation level of a user and provide an output signal indicative of said blood-oxygen saturation level;	p. 7, line 29 to p. 8, line 5; p. 11, line 9; p. 12, lines 25-29; p. 13, line 3 to p. 14, line 7; and Figure 1.
a valve, a first port of said valve adapted to be connected to said oxygen supply and a second port adapted to be connected to said delivery apparatus, said valve having a first position permitting oxygen to flow from said supply to said delivery apparatus, and a second position preventing oxygen from flowing from said supply to said delivery apparatus;	p. 16, line 4 to p. 17, line 2; and Figure 2.
a pressure sensor, said sensor associated with a said valve, said sensor arranged to detect a period of inhalation by said user by detecting a condition of reduced pressure associated with said delivery apparatus for delivering supplemental oxygen to a user when said valve is in said second position;	p. 14, line 23 to p. 16, line 12.
a selector adapted to accept a target blood-oxygen saturation level;	p. 19, lines 18-24; p. 21, line 30 to p. 22, lines 1 and 15-21; p. 30, lines 18-22; and p. 32, lines 20-21.
a flow sensor, said flow sensor positioned along a flow path between said oxygen supply and said delivery apparatus, said flow sensor configured to generate information regarding a flow rate of oxygen delivered from said oxygen supply to said user; and	p. 15, lines 8-9; p. 17, line 10 to p. 18, line 11; and Figures 1 and 2.

Patent Claim	Disclosure in Specification
a processor arranged to calculate a time	p. 9, lines 13-18; p. 12, lines 6-21; p. 16,
period which said valve should be maintained in	line 28 to p. 17, line 9; p. 18, lines 12-14
its first position to cause a desired amount of	and 18-22; p. 19, line 12 to p. 20, line 16;
oxygen to be delivered to said user when said	
, •=	and Figures 1 and 2.
oximeter indicates a blood-oxygen saturation level	
which is below said goal blood-oxygen saturation	
level and arranged to generate a signal for said	•
time period, which signal applied to said valve	
moves said valve to said first position and causes	
oxygen to be delivered to said user when a	
condition of inhalation is detected by said pressure	•
sensor, and said signal when removed from said	•
valve causes said valve to be moved to said second	
position.	
2. The apparatus in accordance with claim 1	p. 12, lines 6-21; p. 32, line 27 to p. 33,
including a memory associated with said	line 8 with p. 35, lines 10-21; p. 36, line
processor, said memory configured to store flow	28 to p. 37, line 2; and p. 37, lines 8-14.
rate information.	
3. The apparatus in accordance with claim 1	Please see citations at claim 1.
wherein said processor, flow sensor, valve and	
pressure sensor are associated with said processor	
and said selector comprises a user-actuatable	
input.	·
4. The apparatus in accordance with claim 1	p. 15, line 20 to page 16, line 3.
wherein said pressure sensor comprises a	
diaphragm exposed to the atmosphere on opposing	,
sides so as to be altitude correcting.	·
5. A method of controlling a flow of	
supplemental oxygen from an oxygen supply to a	
user through a delivery apparatus in an open-loop	
breathing system, the delivery apparatus including	
a valve moveable between a first position	
permitting oxygen to flow from said supply to said	
user and a second position for preventing oxygen	
to flow from said supply to said user comprising	
the steps of:	·
receiving a goal blood-oxygen saturation	p. 9, lines 11-18; p. 19, lines 19-21; p. 21,
level of a user;	line 30 to p. 22, line 1; p. 22, lines 10-12;
,	and Figures 1 and 2. Also, please see
	citations at claim 1.
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Patent Claim determining an actual blood-oxygen saturation level of a user;	p. 9, lines 11-18; p. 12, line 22 to p. 14,
	p. 9, lines 11-18; p. 12, line 22 to p. 14,
saturation level of a user,	line 22; p. 19, line 25 and Figure I.
determining a length of time said valve should be moved to said first position in order to deliver a desired quantity of oxygen to achieve said goal blood-oxygen saturation level based upon said actual blood-oxygen saturation level;	p. 9, lines 13-18; p. 16, lines 4-12; p. 19, line 12 to p. 23, line 12.
detecting the initiation of inhalation by said user;	p. 5, lines 4-6 and lines 20-21; p. 6, lines 2-3; p. 6, lines 18-19; p. 7, lines 12-14; p. 14, line 25 to p. 15, line 2; and p. 16, lines 5-7.
moving said valve from said second position to said first position for said determined length of time when said inhalation is detected;	p. 16, lines 5-10; and p. 16, line 28 to p. 17, line 9. Also, please see citations at claim 1.
returning said valve to said second position; and	p. 16, lines 21-25. Also, please see citations at claim 1.
generating information regarding an average flow rate of oxygen delivered from said supply to said user;	p. 23, lines 14-21; p. 36, line 28 to p. 37, line 14.
determining if a change in average flow rate exceeds a predetermined amount and, if so, triggering an alarm.	p. 11, line 12; and p. 36, line 28, to p. 27, line 14.
6. The method in accordance with claim 5 wherein said step of determining a blood-oxygen saturation level comprises measuring a blood-oxygen saturation level of said user with a pulse-oximeter.	p. 11, lines 3-6; p. 13, lines 3-4; and p. 26, lines 1-2.
7. The method in accordance with claim 5 wherein said step of determining the initiation of inhalation by a user comprises sensing a drop in pressure at said delivery apparatus.	p. 15, lines 22-26.
8. The method in accordance with claim 5 wherein said predetermined amount comprises a predetermined percentage change in average flow rate.	p. 36, line 28 to p. 27, line 7.

APPENDIX A CLAIM Patent Claim	Disclosure in Specification
9. The method in accordance with claim 5 wherein said step of triggering an alarm comprises illuminating a light.	p. 11, line 12; and p. 31, lines 26-27.
10. The method in accordance with claim 5 wherein said step of triggering an alarm comprises emitting an audible noise.	p. 11, line 12; and p. 31, lines 26-27.
11. The method in accordance with claim 5 including the step of storing flow rate information received from said output of said flow sensor and utilizing said stored information to generate said average flow rate.	p. 12, line 15; p. 23, lines 14-21; p. 32, line 27 to p. 33, line 10 with p. 35, lines 10 and 15-21; and p. 36, line 28 to p. 37, line 2 and lines 8-14.
12. The method in accordance with claim 5 wherein said step of generating information regarding an average flow rate comprises generating flow rate information with a flow sensor and utilizing said flow rate information to generate information regarding average flow rate.	p. 15, lines 7-13; p. 23, lines 14-21; p. 32, line 27 to p. 33, line 10 with p. 35, lines 10, 15-21; p. 36, line 28 to p. 37, line 14.
13. A method of controlling a flow of oxygen from an oxygen supply to a user comprising the following steps:	
providing an amount of oxygen to a user in a breathing system, said amount of oxygen determined by comparing a desired blood-oxygen content level with a measured blood-oxygen content level, said amount of oxygen delivered to said user when a period of inhalation of said user is detected, said amount of oxygen provided to said user continuously automatically adjusted based upon said desired and measured blood-oxygen content levels; and	Please see citations at claim 5.
determining an average dose time, said average dose time indicative of the average flow rate of oxygen delivered to said user and triggering an alarm if said average dose time changes by an amount exceeding a predetermined amount.	p. 36, line 28 to p. 37, line 14. Also, please see citations at claim 11.
14. The method in accordance with claim 13 including the step of opening a valve to provide said amount of oxygen.	Please see citations at claim 1.

Patent Claim	Y
	Disclosure in Specification
15. A method of controlling a flow of	
supplemental oxygen from an oxygen supply to a	
user through a delivery apparatus in an open-loop	
breathing system, the delivery apparatus including	
a valve moveable between a first position to flow	
from said supply to said user and a second position	ļ
for preventing oxygen to flow from said supply to	
said user, comprising the steps of:	ļ
receiving a goal blood-oxygen saturation level of a user,	Please see citations at claim 5.
determining an actual blood-oxygen saturation level of a user;	Please see citations at claim 5.
determining a breath rate of said user,	p. 22, lines 18-21; p. 32, lines 8-9; and p. 33, line 16 to p. 34, line 14.
sensing periods of inhalation by said user;	Please see citations at claim 5.
determining a length of time said valve should be moved to said first position in order to deliver a desired quantity of oxygen, said determining step comprising determining a maximum time said valve should be moved to said first position, determining a minimum time said valve should be moved to said first position, and determining a variable time said valve should be moved to said first position;	p. 23, line 28 to p. 24, line 21. Also, please see citations at claim 5.
detecting the initiation of inhalation by said user; and	Please see citations at claim 5.
moving said valve from said second position to said first position for said determined length of time; and	Please see citations at claim 5.
returning said valve to said second position.	Please see citations at claim 5.
16. The method in accordance with claim 15 wherein said step of determining a blood oxygen saturation level comprises measuring a blood-oxygen saturation level of said user with a pulse-oximeter.	Please see citations at claim 6.

Patent Claim	Disclosure in Specification
17. The method in accordance with claim 15 wherein said step of determining the initiation of inhalation by a user comprises sensing a drop in pressure at said delivery apparatus.	Please see citations at claim 7.
18. The method in accordance with claim 15 wherein said desired quantity of oxygen comprises a maximum quantity when said actual bloodoxygen saturation level is below said goal bloodoxygen saturation level.	p. 23, line 28 to p. 24, line 21.
19. The method in accordance with claim 15 wherein said desired quantity of oxygen comprises a linearly changing quantity between a minimum quantity corresponding to said minimum time and a maximum quantity corresponding to said maximum time.	p. 23, line 28 to p. 24, line 21.
20. The method in accordance with claim 15 wherein said step of moving said valve comprises applying a signal to said valve causing said valve to be retained in its first position for said determined length of time.	Please see citations at claim 1.
21. A portable oxygen delivery control apparatus for controlling a flow of oxygen to a user in an open-loop breathing system including an oxygen supply and a delivery apparatus for delivering supplemental oxygen to a user comprising:	
an oximeter arranged to measure a blood- oxygen saturation level of a user and provide an output signal indicative of said blood-oxygen saturation level;	Please see citations at claim 1.
a valve, a first port of said valve adapted to be connected to said oxygen supply and a second port adapted to be connected to said delivery apparatus, said valve having a first position permitting oxygen to flow from said supply to said delivery apparatus, and a second position preventing oxygen from flowing from said supply to said delivery apparatus;	Please see citations at claim 1.

Patent Claim	Disclosure in Specification
a pressure sensor, said sensor associated with a said valve, said sensor arranged to detect a period of inhalation by said user;	Please see citations at claim 1.
a selector adapted to accept a target blood-oxygen saturation level;	Please see citations at claim 1.
an average dose time calculator adapted to determine an amount of oxygen delivered to said user from said oxygen supply; and	Please see citations at claims 1 and 5.
a processor arranged to calculate a dose time period which said valve should be maintained in its first position to cause a desired amount of oxygen to be delivered to said user when said oximeter indicates a blood-oxygen saturation level which is below said goal blood-oxygen saturation level and arranged to generate a signal for said dose time period, which signal applied to said valve moves said valve to said first position and causes oxygen to be delivered to said user when a condition of inhalation is detected by said pressure sensor, and said signal when removed from said valve causes said valve to be moved to said second position, and said processor configured to utilize average dose time information generated by said average dose time calculator and trigger an alarm in the event said amount of oxygen delivered to said user from said oxygen supply meets a predetermined criteria.	Please see citations at claims 1, 5, 11, and 12.
22. The apparatus in accordance with claim 21 including a memory associated with said processor, said memory configured to store said average dose time information.	Please see citations at claims 2 and 11.
23. The apparatus in accordance with claim 21 wherein said alarm comprises an audible warning.	Please see citations at claim 10.
24. The apparatus in accordance with claim 21 wherein said alarm comprises a visual warning.	Please see citations at claim 9.

Patent Claim	Disclosure in Specification
25. The apparatus in accordance with claim 21 wherein said processor, flow sensor, valve and pressure sensor are associated with a printed circuit board located within a housing and said selector comprises a user-actuatable input extending from said housing.	p. 12, lines 6-21; and p. 30, lines 18-22.
26. The apparatus in accordance with claim 21 wherein said pressure sensor comprises a diaphragm exposed to the atmosphere on opposing sides so as to be altitude correcting.	Please see citations at claim 4.
27. A method of controlling a flow of supplemental oxygen from an oxygen supply to a user through a delivery apparatus in an open-loop breathing system, the delivery apparatus including a valve moveable between a first position permitting oxygen to flow from said supply to said user and a second position for preventing oxygen to flow from said supply to said user comprising the steps of:	
receiving a goal blood-oxygen saturation level of a user;	Please see citations at claim 5.
determining an actual blood-oxygen saturation level of a user;	Please see citations at claim 5.
determining a length of time said valve should be moved to said first position in order to deliver a desired quantity of oxygen to achieve said goal blood-oxygen saturation level based upon said actual blood-oxygen saturation level;	Please see citations at claim 5.
detecting the initiation of inhalation by said user;	Please see citations at claim 5.
moving said valve from said second position to said first position for said determined length of time when said inhalation is detected;	Please see citations at claim 5.
returning said valve to said second position;	Please see citations at claim 5.
generating information regarding an average dose time of oxygen delivered from said supply to said user; and	Please see citations at claim 5.

Patent Claim	Disclosure in Specification
determining if a change in said average dose time exceeds a predetermined amount and, if so, triggering an alarm.	p. 36, line 28 to p. 37, line 13.
28. The method in accordance with claim 27 wherein said step of determining a blood-oxygen saturation level comprises measuring a blood-oxygen saturation level of said user with a pulse-oximeter.	Please see citations at claim 6.
29. The method in accordance with claim 27 wherein said step of determining the initiation of inhalation by a user comprises sensing a drop in pressure at said delivery apparatus.	Please see citations at claim 1.
30. The method in accordance with claim 27 wherein said step of triggering an alarm comprises illuminating a light.	Please see citations at claim 9.
31. The method in accordance with claim 27 wherein said step of triggering an alarm comprises emitting an audible noise.	Please see citations at claim 10.
32. The method in accordance with claim 27 including the step of storing current dose time information and utilizing said stored current dose time information to generate said average dose time.	p. 36, line 28 to p. 37, line 13.
33. A portable oxygen delivery control apparatus for controlling a flow of oxygen to a user in an open-loop breathing system including an oxygen supply and a delivery apparatus for delivering supplemental oxygen to a user comprising:	
an oximeter arranged to measure a blood- oxygen saturation level of a user and provide an output signal indicative of said blood-oxygen saturation level;	Please see citations at claim 1.

APPENDIX A CLAIN Patent Claim	Disclosure in Specification
	
a valve, a first port of said valve adapted	Please see citations at claim 1.
to be connected to said oxygen supply and a	
second port adapted to be connected to said	
delivery apparatus, said valve having a first	
position permitting oxygen to flow from said	
supply to said delivery apparatus, and a second	
position preventing oxygen from flowing from	
said supply to said delivery apparatus;	
a pressure sensor, said sensor associated	Please see citations at claims 1 and 4.
with a said valve, said sensor including a	
diaphragm exposed to the atmosphere on opposing	
sides so as to be altitude correcting and arranged to	
detect a period of inhalation by said user by	
detecting a condition of reduced pressure	
associated with said delivery apparatus for	(3)
delivering supplemental oxygen to a user when	
said valve is in said second position;	
a selector adapted to accept a target	Please see citations at claim 1.
blood-oxygen saturation level;	
a flow sensor, said flow sensor	Please see citations at claim 1.
positioned along a flow path between said oxygen	
supply and said delivery apparatus, said flow	
sensor configured to generate information	
regarding a flow rate of oxygen delivered from	
said oxygen supply to said user; and	
a processor arranged to calculate a time	Please see citations at claims 1, 5, and 13.
period which said valve should be maintained in	
its first position to cause a desired amount of	
oxygen to be delivered to said user when said	•
oximeter indicates a blood-oxygen saturation level	
which is below said goal blood-oxygen saturation	
level and arranged to generate a signal for said	·
time period, which signal applied to said valve	
moves said valve to said first position and causes	
oxygen to be delivered to said user when and a	
condition of inhalation is detected by said pressure	
sensor, and said signal when removed from said	
valve causes said valve to be moved to said second	
position, and said processor configured to utilize	
flow rate information generated by said flow	
sensor and trigger an alarm in the event said	
utilized flow rate information meets a	
predetermined criteria.	
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APPENDIX A CLAIR	
Patent Claim	Disclosure in Specification
34. The apparatus in accordance with claim 33 including a memory associated with said processor, said memory configured to store flow rate information.	Please see citations at claim 2.
35. The apparatus in accordance with claim 33 wherein said alarm comprises an audible warning.	Please see citations at claim 10.
36. The apparatus in accordance with claim 33 wherein said alarm comprises a visual warning.	Please see citations at claim 9.
37. The apparatus in accordance with claim 33 wherein said processor, flow sensor, valve and pressure sensor are associated with a printed circuit board located within a housing and said selector comprises a user-actuatable input extending from said housing.	Please see citations at claims 3 and 25.
38. A method of controlling a flow of supplemental oxygen from an oxygen supply to a user through a delivery apparatus in an open-loop breathing system, the delivery apparatus including a valve moveable between a first position permitting oxygen to flow from said supply to said user and a second position for preventing oxygen to flow from said supply to said user comprising the steps of:	
receiving a goal blood-oxygen saturation level of a user;	Please see citations at claim 5.
determining an actual blood-oxygen saturation level of a user;	Please see citations at claim 5.
determining a length of time said valve should be moved to said first position in order to deliver a desired quantity of oxygen to achieve said goal blood-oxygen saturation level based upon said actual blood-oxygen saturation level;	Please see citations at claim 5.
detecting the initiation of inhalation by said user;	Please see citations at claim 5.
moving said valve from said second position to said first position for said determined length of time when said inhalation is detected;	Please see citations at claim 5.

APPENDIX A CLAIM CHART		
Patent Claim	Disclosure in Specification	
returning said valve to said first position; and	Please see citations at claim 5.	
generating at two or more times information regarding an average flow rate of oxygen delivered from said supply to said user;	p. 36, line 28 to p. 37, line 14. Also, please see citations at claim 5.	
determining if a change in average flow rate exceeds a predetermined amount and, if so, triggering an alarm.	Please see citations at claim 5.	
39. The method in accordance with claim 38 wherein said step of determining a blood-oxygen saturation level comprises measuring a blood-oxygen saturation level of said user with a pulse-oximeter.	Please see citations at claim 6.	
40. The method in accordance with claim 38 wherein said step of determining the initiation of inhalation by a user comprises sensing a drop in pressure at said delivery apparatus.	Please see citations at claim 1.	
41. The method in accordance with claim 38 wherein said predetermined amount comprises a predetermined percentage change in average flow rate.	Please see citations at claim 8.	
42. The method in accordance with claim 38 wherein said step of triggering an alarm comprises illuminating a light.	Please see citations at claim 9.	
43. The method in accordance with claim 38 wherein said step of triggering an alarm comprises emitting an audible noise.	Please see citations at claim 10.	
44. The method in accordance with claim 38 including the step of storing flow rate information received from said output of said flow sensor and utilizing said stored information to generate said average flow rate.	Please see citations at claim 11.	

Patent Claim	Disclosure in Specification
 45. The method in accordance with claim 38 wherein said step of generating information regarding an average flow rate comprises generating flow rate information with a flow sensor and utilizing said flow rate information to generate information regarding average flow rate. 46. A method of controlling a flow of oxygen from an oxygen supply to a user comprising the following steps: 	Please see citations at claim 12.
providing an amount of oxygen to a user in a breathing system, said amount of oxygen determined by comparing a desired blood-oxygen content level with a measured blood-oxygen content level, said amount of oxygen delivered to said user when a period of inhalation of said user is detected, said amount of oxygen provided to said user continuously automatically adjusted based upon said desired and measured blood-oxygen content levels; and determining an average flow rate of oxygen delivered to said user and triggering an alarm if said overage flow rate of oxygen changes by an amount exceeding a predetermined amount.	Please see citations at claim 5.
47. The method in accordance with claim 46 including the step of opening a valve to provide said amount of oxygen.	Please see citations at claim 1.
48. The method in accordance with claim 46 including the step of utilizing flow rate data received as an output of a flow sensor to calculate said average flow rate.	Please see citations at claim 11.
49. The method in accordance with claim 46 including the step of storing said flow rate data.	Please see citations at claim 11.

APPENDIX A CLAIN Patent Claim	Disclosure in Specification
50. A method of controlling a flow of supplemental oxygen from an oxygen supply to a user through a delivery apparatus in an open-loop breathing system, the delivery apparatus including a valve moveable between a first position to flow from said supply to said user and a second position for preventing oxygen to flow from said supply to said user, comprising the steps of:	
receiving a goal blood-oxygen saturation level of a user;	Please see citations at claim 5.
determining an actual blood-oxygen saturation level of a user;	Please see citations at claim 5.
determining a breath rate of said user,	Please see citations at claims 5 and 15.
sensing periods of inhalation by said user;	Please see citations at claim 5.
determining a length of time said valve should be moved to said first position in order to deliver a desired quantity of oxygen, said determining step comprising determining a first maximum time if said actual level has not reached said goal level or said actual level is below a minimum level, determining a second minimum time if said actual level is above said goal level, and determining a variable time if said actual level has at least once reached said goal level but said actual level is between said minimum level and said goal level, said step of determining a variable time including determining a breath rate of said user from said sensed periods of inhalation by said user, determining a delivery volume comprising a desired quantity of oxygen divided by said breath rate, and determining said variable time by dividing said delivery volume by a flow rate of supplemental oxygen available;	Please see citations at claims 5 and 15.
detecting the initiation of inhalation by said user; and	Please see citations at claim 5.
moving said valve from said second position to said first position for said determined length of time; and	Please see citations at claim 5.

Patent Claim	Disclosure in Specification
returning said valve to said first position.	Please see citations at claim 5.
51. The method in accordance with claim 50 wherein said step of determining a blood oxygen saturation level comprises measuring a blood-oxygen saturation level of said user with a pulse-oximeter.	Please see citations at claim 6.
52. The method in accordance with claim 50 wherein said step of determining the initiation of inhalation by a user comprises sensing a drop in pressure at said delivery apparatus.	Please see citations at claim 1.
53. The method in accordance with claim 50 wherein said desired quantity of oxygen comprises a maximum quantity when said actual level is below said minimum level.	Please see citations at claim 18.
54. The method in accordance with claim 50 wherein said desired quantity of oxygen comprises a linearly changing quantity between a minimum quantity corresponding to said minimum time and a maximum quantity corresponding to said maximum time.	Please see citations at claim 19.
55. The method in accordance with claim 50 wherein said step of moving said valve comprises applying a signal to said valve causing said valve to be retained in its first position for said determined length of time.	Please see citations at claim 1.
56. The method in accordance with claim 50 wherein said determined length of time does not exceed one-half of an inhalation time of said user.	Please see citations at claim 19.
57. A portable oxygen delivery control apparatus for controlling a flow of oxygen to a user in an open-loop breathing system including an oxygen supply and a delivery apparatus for delivering supplemental oxygen to a user comprising:	
an oximeter arranged to measure a blood- oxygen saturation level of a user and provide an output signal indicative of said blood-oxygen saturation level;	Please see citations at claim 1.

APPENDIX A CLAIM CHART	
Patent Claim	Disclosure in Specification
a valve, a first port of said valve adapted	Please see citations at claim 1.
to be connected to said oxygen supply and a	
second port adapted to be connected to said	
delivery apparatus, said valve having a first	
position permitting oxygen to flow from said	
supply to said delivery apparatus, and a second	
position preventing oxygen from flowing from	
said supply to said delivery apparatus;	
said supply to said delivery apparatus,	
and an arrange of the second and arrange of the second and arrange of the second and arrange of the second arr	Please see citations at claims 1, 4, and 5.
a pressure sensor, said sensor associated	Thease see citations at citation 1, 1, === 0.
with a said valve, said sensor including a	
diaphragm exposed to the atmosphere on opposing	
sides so as to be altitude correcting and arranged to	
detect a period of inhalation by said user by	
detecting a condition of reduced pressure	
associated with said delivery apparatus for	,
delivering supplemental oxygen to a user when	
said valve is in said second position;	
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a selector adapted to accept a target	Please see citations at claim 1.
blood-oxygen saturation level;	
a flow sensor, said flow sensor	Please see citations at claim 1.
positioned along a flow path between said oxygen	
supply and said delivery apparatus, said flow	
sensor configured to generate information	*
regarding a flow rate of oxygen delivered from	
said oxygen supply to said user; and	*
	m to it is an alabase 1 and 5
a processor arranged to calculate a time	Please see citations at claims 1 and 5.
period which said valve should be maintained in	
its first position to cause a desired amount of	
oxygen to be delivered to said user when said	
oximeter indicates a blood-oxygen saturation level	
which is below said goal blood-oxygen saturation	
level and arranged to generate a signal for said	
time period, which signal applied to said valve	
moves said valve to said first position and causes	
oxygen to be delivered to said user when a	
condition of inhalation is detected by said pressure	
sensor, and said signal when removed from said	
valve causes said valve to be moved to said second	
position, and said processor configured to utilize	
flow rate information generated by said flow	
sensor and trigger an alarm in the event said	
utilized flow rate information meets a	
predetermined criteria.	
processimmed criteria.	*

APPENDIX A CLAIN Patent Claim	Disclosure in Specification
58. The apparatus in accordance with claim 57 including a memory associated with said processor, said memory configured to store flow rate information.	Please see citations at claim 2.
59. The apparatus in accordance with claim 57 wherein said alarm comprises an audible warning.	Please see citations at claim 10.
60. The apparatus in accordance with claim 57 wherein said alarm comprises a visual warning.	Please see citations at claim 9.
61. The apparatus in accordance with claim 57 wherein said processor, flow sensor, valve and pressure sensor are associated with a printed circuit board located within a housing and said selector comprises a user-actuatable input extending from said housing.	Please see citations at claims 3 and 25.
62. A method of controlling a flow of supplemental oxygen from an oxygen supply to a user through a delivery apparatus in an open-loop breathing system, the delivery apparatus including a valve moveable between a first position permitting oxygen to flow from said supply to said user and a second position for preventing oxygen to flow from said supply to said user comprising the steps of:	
receiving a goal blood-oxygen saturation level of a user;	Please see citations at claim 5.
determining an actual blood-oxygen saturation level of a user;	Please see citations at claim 5.
determining a length of time said valve should be moved to said first position in order to deliver a desired quantity of oxygen to achieve said goal blood-oxygen saturation level based upon said actual blood-oxygen saturation level;	Please see citations at claim 5.
detecting the initiation of inhalation by said user;	Please see citations at claim 5.
moving said valve from said second position to said first position for said determined length of time when said inhalation is detected;	Please see citations at claim 5.

Patent Claim	Disclosure in Specification
returning said valve to said second position; and	Please see citations at claim 5.
generating at two or more times information regarding an average flow rate of oxygen delivered from said supply to said user;	Please see citations at claims 5 and 38.
determining if a change in average flow rate exceeds a predetermined amount and, if so, triggering an alarm.	Please see citations at claim 5.
63. The method in accordance with claim 62 wherein said step of determining a blood-oxygen saturation level comprises measuring a blood-oxygen saturation level of said user with a pulse-oximeter.	Please see citations at claim 6.
64. The method in accordance with claim 62 wherein said step of determining the initiation of inhalation by a user comprises sensing a drop in pressure at said delivery apparatus.	Please see citations at claims 1 and 5.
65. The method in accordance with claim 62 wherein said predetermined amount comprises a predetermined percentage change in average flow rate.	Please see citations at claim 8.
66. The method in accordance with claim 62 wherein said step of triggering an alarm comprises illuminating a light.	Please see citations at claim 9.
67. The method in accordance with claim 62 wherein said step of triggering an alarm comprises emitting an audible noise.	Please see citations at claim 10.
68. The method in accordance with claim 62 including the step of storing flow rate information received from said output of said flow sensor and utilizing said stored information to generate said average flow rate.	Please see citations at claim 11.

Patent Claim	Disclosure in Specification
69. The method in accordance with claim 62 wherein said step of generating information regarding an average flow rate comprises generating flow rate information with a flow sensor and utilizing said flow rate information to generate information regarding average flow rate. 70. A method of controlling a flow of oxygen from an oxygen supply to a user comprising the following steps:	Please see citations at claim 12.
providing an amount of oxygen to a user in a breathing system, said amount of oxygen determined by comparing a desired blood-oxygen content level with a measured blood-oxygen content level, said amount of oxygen delivered to said user when a period of inhalation of said user is detected, said amount of oxygen provided to said user continuously automatically adjusted based upon said desired and measured blood-oxygen content levels; and	Please see citations at claim 5.
determining an average flow rate of oxygen delivered to said user and triggering an alarm if said average flow rate of oxygen changes by an amount exceeding a predetermined amount.	Please see citations at claim 5.
71. The method in accordance with claim 70 including the step of opening a valve to provide said amount of oxygen.	Please see citations at claim 5.
72. The method in accordance with claim 70 including the step of utilizing flow rate data received as an output of a flow sensor to calculate said average flow rate.	Please see citations at claim 11.
73. The method in accordance with claim 70 including the step of storing said flow rate data.	Please see citations at claim 11.

APPENDIX A CLAIN Patent Claim	Disclosure in Specification
74. A method of controlling a flow of supplemental oxygen from an oxygen supply to a user through a delivery apparatus in an open-loop breathing system, the delivery apparatus including a valve moveable between a first position to flow from said supply to said user and a second position for preventing oxygen to flow from said supply to said user, comprising the steps of:	,
receiving a goal blood-oxygen saturation level of a user;	Please see citations at claim 5.
determining an actual blood-oxygen saturation level of a user;	Please see citations at claim 5.
determining a breath rate of said user;	Please see citations at claim 15.
sensing periods of inhalation by said user;	Please see citations at claim 5.
determining a length of time said valve should be moved to said first position in order to deliver a desired quantity of oxygen, said determining step comprising determining a first maximum time if said actual level has not reached said goal level or said actual level is below a minimum level, determining a second minimum time if said actual level is above said goal level, and determining a variable time if said actual level has at least once reached said goal level but said actual level is between said minimum level and said goal level, said step of determining a variable time including determining a breath rate of said user from said sensed periods of inhalation by said user, determining a delivery volume comprising a desired quantity of oxygen divided by said breath rate, and determining said variable time by dividing said delivery volume by a flow rate of supplemental oxygen available;	Please see citations at claim 5 and 15.
detecting the initiation of inhalation by said user; and	Please see citations at claim 5.
moving said valve from said second position to said first position for said determined length of time; and	Please see citations at claim 5.

Patent Claim	Disclosure in Specification
returning said valve to said second position.	Please see citations at claim 5.
75. The method in accordance with claim 74 wherein said step of determining a blood oxygen saturation level comprises measuring a blood-oxygen saturation level of said user with a pulse-oximeter.	Please see citations at claim 6.
76. The method in accordance with claim 74 wherein said step of determining the initiation of inhalation by a user comprises sensing a drop in pressure at said delivery apparatus.	Please see citations at claim 1.
77. The method in accordance with claim 74 wherein said desired quantity of oxygen comprises a maximum quantity when said actual level is below said minimum level.	Please see citations at claim 18.
78. The method in accordance with claim 74 wherein said desired quantity of oxygen comprises a linearly changing quantity between a minimum quantity corresponding to said minimum time and a maximum quantity corresponding to said maximum time.	Please see citations at claim 19.
79. The method in accordance with claim 74 wherein said step of moving said valve comprises applying a signal to said valve causing said valve to be retained in its first position for said determined length of time.	Please see citations at claim 1.
80. The method in accordance with claim 74 wherein said determined length of time does not exceed one-half of an inhalation time of said user.	Please see citations at claim 19.